REMARKS

In the present Amendment, claims 1 and 7 have been amended to recite a step of forming a dam so as to surround electrodes on the surface of a substrate having electrodes in its surface and covered with a solder resist film that is provided with an opening part disposed in the electrodes. These amendments are supported by the specification, for example, page 4, last paragraph.

Claims 5 and 6 have been amended to improve their form. These amendments are not to be deemed to narrow the scope of the claims.

Claims 8 and 9 have been added. Claims 8 and 9 are supported by the specification, for example, original claims 1, and 5 and 6, respectively.

No new matter has been added and entry of the Amendment is respectfully requested. Upon entry of the Amendment, claims 1-9 will be all the claims pending in the application.

I. Response to Rejection Under 35 U.S.C. § 102

Claims 1-4 and 7 are rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by Japan Publication No 2002-334895 to Sakuyama Seiki ("JP '895").

Applicants respectfully submit that the present claims are novel over JP '895 for at least the following reasons.

In the present invention, dams 4 are formed so as to surround the electrodes 2 on the surface of the substrate 1 covered with a solder resist film 3 (Fig. 1(a) and page 4, lines 19 to 22 of the present specification). In contrast, JP '895 does not disclose a solder resist film.

Further, JP '895 describes that "It is filled up with the pewter paste 33 which contains predetermined pewter powder in opening 32a of the resin mask 32" (Paragraph No. [0006], lines 4 to 6). However, JP '895 does not disclose "a solder precipitating composition" recited in the present claims.

In view of the above, Applicants respectfully submit that JP '895 does not disclose or anticipate the present claims and thus the rejection should be withdrawn.

II. Response to Rejection Under 35 U.S.C. § 103

Claims 5-6 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over JP '895 in view of Ikeda et al. (U.S. Patent No. 6,923,875).

Applicants respectfully submit that the present invention are patentable over the cited references at least for the reason that the present invention provides unexpectedly superior results, as demonstrated by the comparison of Examples and Comparative Examples in the present specification (Table 1).

Specifically, in Comparative Examples 2 and 4, which used conventional solder paste in dam forming as described in JP '895, voids occurred within bumps, and variation in height of bumps was large. Further, Comparative Example 1 according to Ikeda et al allowed a large variation in height of bumps and poor precision. The solder precipitating composition of Ikeda et al may reduce variation in the height by repeating the solder precipitating process several times (see Comparative Example 3); however, efficiency and productivity were low.

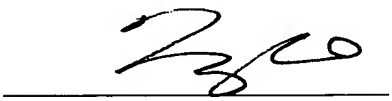
In contrast, the present invention makes it possible to form solder bumps having sufficient height with high precision in a single process by forming dams around the pads of the substrate and using the specific solder precipitating composition. Neither JP '895 nor Ikeda et al disclose or suggest such effects of the present invention. Accordingly, Applicants respectfully submit that the present claims are not obvious even if there might be motivation to combine the cited references, and thus the rejection should be withdrawn.

III. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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